SYSTEMS AND METHODS OF INTERFACING WITH A MACHINE

ABSTRACT

Systems and methods of interfacing with a machine are described. In one aspect, sets of contemporaneous images of an interactive space are acquired from multiple respective fields of view. An input target is detected in the acquired images. Coordinates of the input target detected in the acquired images are computed. A spatiotemporal input data structure linking input target coordinates computed from contemporaneous images to respective reference times is constructed. The spatiotemporal input data structure is processed to identify an input instruction. The identified input instruction is executed on a machine. In another aspect, an image is displayed at a display location disposed between a viewing space and an interactive space, wherein the displayed image is viewable from a perspective in the viewing space. Images of the interactive space are acquired from at least one field of view. An input target is detected in the acquired images. Coordinates of the input target detected in the acquired images are computed. An input instruction is identified based on the computed input coordinates. The identified input instruction is executed on a machine.